

Abstract of the disclosure

In order to supply the optical fiber for attenuating optical signal enable the
5 attenuation amount to become flat in wide wavelength scope, simultaneously adding at least
two kinds of dopants for attenuating optical signal over the core and the cladding of the
optical fiber. Then, properly adjusting the kind and the concentration of dopants for
manufacturing the optical fiber 1 for attenuating optical signal; simultaneously adding the
dopant enabling the absorption of optical signal to increase with the wavelength become long
10 and the dopant enabling the absorption of optical signal to decrease with the wavelength
become long. As the dopant, it is desired to select at least two kinds of transitional metals
from Co, Ni, Cr, V, Fe, Mn, Tb and Tm. Further, as the doped area, it is desired to dope the 6
times of the center portion of the core from the center of the core.